

For those instances when a user has soiled or dirty hands and does not want to touch the screen display **12**, a simple stylus **54** can be provided, as illustrated in FIG. **3** in order that the user can pick up the stylus **54** and use it instead of their finger as a touch instrument on the overlay **22**. Additionally, by making the interface simple enough to operate via touch-screen, the system **10** is also practical enough to operate using a remote control, similar to the remote control for the TV, which contains a cursor control device and a single click button.

In addition to the basic computer functions above, users may also find many other more complicated applications that can easily be controlled without a keyboard. Web browsing in general, and PointCast operation in particular, are some additional possibilities.

FIG. **3** shows the system after the display **10** has been disengaged from the support rails **24** and **26** on the edges of the base section **16** and brought even farther forward, until the display is positioned close to the user and almost parallel to the table-top, thereby extending the folding or viewing angle to approximately 180 degrees. In FIG. **2** the keyboard **14** is stowed on top of the base section **16**, however if the keyboard **14** had already been placed on the table in front of the base unit **10**, as shown in FIG. **3**, the display section **20** would simply extend out over the keyboard **14**, with the front edge of the display section resting on the table as illustrated. This mechanical configuration is ideally suited to pen-based or stylus operation of the computer unit **10**. In addition to supporting traditional, but not very widely adopted pen-computing applications, this configuration may find widespread use (i) by children working with art programs (e.g., the KidPix program) where drawing is difficult because of the requirement to manipulate the mouse, (ii) for digital photo touch-up and manipulation where operating directly on the image is more natural than using a mouse, or (iii) for quickly jotting down a phone number or other quick note when a keyboard is not convenient.

Since the presented configurations of the device in product form can be used in several different environments in the home, there are several optional types of docking stations that are useful. One such is for use in a home-entertainment center. A further option, useful in certain home kitchen environments, is a swiveling base such as a lazy-susan docking station which allows the system to rotate at least a plus-or-minus 180 degrees without cable interference or the dragging of cables around. The lazy-susan platform consists of an external AC adapter and a DC power cord which extends to the swivel base and coils around inside the base sufficiently to allow the base to rotate at least plus or minus 180 degrees. To further simplify the cabling, the AC-adaptor brick can also include an RJ-11 jack for a regular telephone connection, and/or a cable-TV input jack. Signals from the phone line and cable TV coax plugged into the AC-adaptor brick can be brought up to the swivel base through a single appropriately shielded and constructed cable, and then into the base unit **10** which, for convenience, can be placed on a kitchen counter with full telephone, power, and TV connectivity, but with only one visible cable required on the counter. Furthermore, this system is free to rotate without moving this cable.

A further environmental orientation has the computer unit **10** disposed atop of a kitchen counter in a traditional notebook mode, but placed upon the top of the swivel base system, and opened in a fashion to provide the normal notebook style configuration. In this configuration the unit **10** appears very 'computer-like' and possibly does not appear as a usual or desirable kitchen tool or utensil and

something that all consumers possibly want in their kitchen. Notwithstanding this, the design concept can easily be reconfigured so as to blend in more appropriately with the kitchen environment, as follows. More suitable and acceptable perhaps is what can be described as a kitchen counter kiosk/TV mode.

The kiosk style on the kitchen counter is a very suitable configuration for TV watching, display of PointCast graphics or other similar information, music-CD playing, and answering-machine/message-center operation. In all cases, the system **10** can easily be swivelled to allow for viewing from various locations around the kitchen. To operate the system, the consumer has the choice of using the touch-screen with overlay **22** or an optional wireless remote control.

Since consumers often have wet or soiled hands while working in the kitchen, operating the system **10** with the touch screen **22** may not always be appropriate or convenient. For this reason, the system is adapted to include a simple plastic stylus **54** held, when not in use, in a conveniently located position to be easily grasped. Users with wet or soiled hands can simply pick up the stylus from its docking holder, use it instead of their finger to touch the screen **12**, and then replace the stylus **54** in the convenient holder. Later, the user can simply wipe or rinse off the plastic stylus **54** as necessary if it is soiled. When configured in the kiosk style, a stylus **54** can be positioned in a pencil well on the side of the machine unit **10**.

While many computer functions can be performed through the touch screen **22** or the remote control **38**, many other tasks such as e-mail are still best handled with a keyboard **14**. In those cases, the keyboard **14** can be easily removed from its stowed position above the bottom section **16** and placed directly on the counter.

In some particularly space-constrained locations, such as a small office cubicle or the space under a kitchen cabinet, it is also possible to mount the computer unit vertically. This is achieved either through the use of an appropriate stand or docking station, which provides freestanding support for the unit, or the system can be mounted directly to a wall or other vertical surface. In the vertical closed configuration, the system **10** has an extremely small footprint, or even zero footprint if mounted on the wall, and valuable desk or counter space is available for non-computer uses.

The system can be mounted vertically in a portrait mode and with the display opened in portrait fashion, thereby forming a sort of 'vertical kiosk' configuration. In this configuration, the keyboard **14** is stowed vertically in its normal location, and a modified device driver for the display would be used to rotate all graphic output into portrait mode, instead of normal landscape mode. Such device drivers exist for most operating systems, and many people feel that portrait mode is actually more natural than landscape mode for many activities such as document processing and/or web-browsing. Portrait Displays Pivot 1700 product available from Portrait Displays Inc. Pheasanton, Calif., is such a suitable driver system where switching from landscape to portrait orientations can be done on the fly, with no need to reboot.

By creating a tri-fold frame structure which combines the top surface of the base section **16**, the inside surface of the middle section **18**, the inside surface of the display section **20** and the two hinges **29** and **52** into one unified mechanical structure, the external dimensions of the unit **10** can be determined using easily interchangeable covers which mount to the frame to enclose the components. The attach-